AMENDMENTS TO THE CLAIMS

This listing will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A [[M]]method for carrying out highly exothermic oxidative reactions in pseudo-isothermal conditions, between reactants fed in continuous flow to a predetermined catalytic bed, ~~characterized in that~~ the method comprising:

feeding at least a part of said continuous flow of reactants ~~is fed~~ within a catalytic mass of said catalytic bed at different points of said catalytic ~~bed~~ mass corresponding to different successive stages of the reaction which takes place in said catalytic bed, at respective different predetermined temperatures and flow-rates.

2. (Currently amended) The [[M]]method according to claim 1, ~~for carrying out highly exothermic oxidative reactions in pseudo-isothermal conditions, between reactants fed in a continuous flow to a predetermined catalytic bed, in which a plurality of heat exchangers is immersed and supported, wherein:~~ further comprising:

positioning a plurality of distribution-suppliers ~~is positioned~~ in said catalytic bed, at different points thereof strictly corresponding to different predetermined stages of said oxidative reaction,

dividing said continuous flow of reactants ~~is divided~~ into a first part or main flow and a second part or control flow with a predetermined temperature and flow-rate,

preheating said first part or main flow ~~is preheated~~ through heat exchange with said catalytic bed, feeding said first part or main flow [[it]] through ~~said~~ a plurality of heat exchangers immersed and supported in said catalytic bed,

recovering said main flow of preheated reactants ~~is recovered~~ and ~~it is fed~~ feeding said main flow continuously to said catalytic bed, and

feeding said second part or control flow ~~is fed~~ to said plurality of distribution-suppliers to inject respective fresh flows of reactants at a predetermined temperature and flow-rate into the catalytic bed.

3. (Currently amended) An [[A]]apparatus for carrying out a highly exothermic oxidative reaction in pseudo-isothermal conditions according to the method of claim 1, comprising a plurality of heat exchangers, wherein with each of said exchangers is associated at least one distribution-supplier suitable for being fed continuously by a flow [[a]] of reactants at a predetermined temperature and flow-rate.

4. (Currently amended) The [[A]]apparatus according to claim 3, wherein said at least one distribution-supplier is supported ~~fixed~~ by said respective heat exchanger.

5. (Currently amended) The [[A]]apparatus according to claim 4, wherein said heat exchanger is plate-shaped and substantially rectangular, inside which a first chamber, intended to be crossed by a respective flow of reactants to be preheated, and a second chamber, separated fluid-tight from said first chamber and in fluid communication with said at least one distribution-supplier are defined.

6. (Currently amended) The [[A]]apparatus according to claim 5, wherein said distribution-supplier comprises a carter fixed to a wall of a respective plate-shaped heat exchanger, with which it substantially defines a duct in fluid communication, on one side, with said second chamber of the exchanger and, on the other side, with the outside of the exchanger itself, through a plurality of holes formed in said carter.

7. (Currently amended) A [[R]]reactor for carrying out highly exothermic catalyzed oxidative reactions in pseudo-isothermal conditions, comprising a shell in which is defined a reaction zone at least partially occupied by a catalytic bed, wherein [[it]] the reactor comprises an apparatus according to claim 3, immersed in said catalytic bed.